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#### REMARKS

##### Disposition of Claims.

Claims 19-49 and 59-81 were pending in the application. Claims 44-49 were withdrawn from consideration pursuant to an earlier restriction requirement. Applicants hereby cancel claims 44-49 without prejudice to pursue these claims in a divisional application. Claims 19-43 and 59-81 remain in the application and all are at issue.

##### Claim Rejection – 35 U.S.C. § 112.

Claims 60, 72 and 73 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The rejections are traversed. With regard to claim 60, the Examiner questions the function of the dividing wall if the zones are open to each other. The Office Action also questions how different temperatures can be maintained if there is an opening. As to the first question, the answer is that there is no dividing wall in claim 60. Claim 60 is dependent directly upon claim 19, which, likewise, does not contain a dividing wall. As to the second question, the specification discloses on page 14, lines 12-16, that "areas 34 and 36 may be separated from each other by a dividing wall or may be opened to each other. Either way, areas, or zones, 34, 36 have a substantially consistent temperature . . . ." It is submitted that one of ordinary skill in the art would readily be able to design a system with two areas that are open to each other, but maintained at different operating temperatures. The skilled artisan would know, by way of example, that airflow and separation distance, to name but two techniques, could be used to accomplish this result. Accordingly, it is submitted that the rejection has been overcome.

Claims 72 and 73 are amended in order to improve their clarity. Because this amendment does not raise new issues of patentability and places the application in a better condition for appeal, it is requested that the amendments be entered.

Withdrawal of the rejections under 35 U.S.C. § 112 is respectfully requested.

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**Claim Rejections – 35 U.S.C. § 103.**

Claims 19, 22-25, 27, 29-30, 36, 39, 42, 43, 59, 61-63, 66, 68-71 and 74-78 were rejected over published International Application No. WO 99/35480 (Breton1) in view of German Patent Publication No. DE 36 11 662 A (Leistner). Claims 64, 65, 79 and 80 were rejected over Breton1/Leistner as applied to claim 19 and in view of United States Patent No. 6,560,545 B2 (Stedman). Claims 28 and 38 were rejected over Breton1/Leistner as applied to claim 19 in view of European Patent Application No. EP 0 880 022 A2 (Tripathi). Claims 37, 40 and 41 were rejected over Breton1/Leistner as applied to claim 19 in view of European Patent Application No. EP 1 176 412 A2 (Reading). Claims 24, 26 and 27 were rejected over Breton1/Leistner as applied to claim 23 and in view of United States Patent No. 6,148,656 (Breton2). Claims 31-33, 35 and 67 were rejected over Breton1/Leistner as applied to claim 29 and in view of United States Patent No. 5,753,185 (Mathews). Claim 34 was rejected over Breton1/Leistner/Mathews as applied to claim 31 and further in view of United States Patent No. 5,201,219 (Bandurski). It is submitted that the Examiner has failed to establish a *prima facie* case of obviousness. Accordingly, the rejections are traversed.

**Claims 37, 40 and 41.**

The rejection of these claims was based, in part, on European Patent No. EP 1 176 412 to Ensfield et al. [*sic* Reading et al.]. This rejection is improper. Reading et al. is the European equivalent of the present application and claims priority from the same United States provisional applications as does the present application. Accordingly, Reading et al. is not a reference to the present application. Because this rejection was based on Reading et al., it is improper and should be withdrawn. Withdrawal is requested.

**Claims 19-28, 36, 38, 39, 42-43, 59, 60, 79 and 80.**

Claim 19 is the only independent claim in this group of claims and the remaining claims are dependent on claim 19 as a base claim. Therefore, claim 19 will be discussed. The rejection of this claim is based upon Breton1 in view of Leistner. Breton1 is directed to an on-board vehicle emission testing system (see Abstract). The Breton1 system includes an instrument module adapted to be detachably connected to the exhaust pipe of a vehicle to provide for flow of exhaust gas therethrough. The instrument module includes a differential pressure probe which allows for the determination of flow rate of the exhaust gas and a gas sampling tube for continuously feeding a sample of the exhaust gas to a gas analyzer. The

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Breton1 gas analyzer is disclosed to be a commercially available unit marketed by Sun/Snap-on under Model MT-3505 portable emission analyzer. The Office Action recognizes that Breton1 does not disclose at least two internal zones commonly enclosed by a housing, the at least two internal zones being at different operating temperatures. However, the Office Action takes the position that Leistner teaches two zones of different temperature and that it would have been obvious to one of ordinary skill in the art to use Leistner's heating arrangement in Breton1 because the "gases must be maintained above the dew point."

Leistner is directed to gas-preparation lines in a cabinet. The lines are connected between gas-analyzing measuring equipment and gas-extraction probes delivering measured gas to the gas preparation lines. The gas-extraction probes are flue-gas connectors that are disclosed for use with DENOX and Flue-gas desulfurization plants (see translation, page 5, lines 1-15). The gas-preparation lines are in a portable cabinet and include such elements as inlet valves, filters, flow pumps, motors, pressure reducers and intermediate feedback conduits (see Abstract). The gas-analyzing measuring equipment includes an  $\text{NH}_3$  measuring device, designated by circuit symbol 41 in Fig. 2. The  $\text{NH}_3$  measuring device is external to the portable cabinet (translation page 16, lines 22-27). The portable cabinet is divided into a first large compartment, shown at the top of Fig. 1, which is heated to  $75^\circ\text{C}$  and another compartment shown at the bottom of Fig. 1 that is maintained at a temperature of between  $5^\circ\text{C}$  and  $10^\circ\text{C}$ .

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation either in the references themselves or in the knowledge that is generally available to one of ordinary skill in the art to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference or references, when combined, must teach or suggest all of the claimed limitations. The teaching or suggestion to make the claimed combination and a reasonable expectation of success must both be found in the prior art and not based upon Applicants' disclosure. *In re Baeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. Section 2143. Claim 19 is as follows:

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19. A vehicular gas emission analyzer assembly for traveling with a vehicle, comprising:

a gas analyzer system having at least two analyzer components, one of said analyzer components operating at a particular temperature and another of said analyzer components operating at an elevated temperature that is higher than said particular temperature, said gas analyzer system adapted to measure at least one emission parameter from an internal combustion engine, said at least one emission parameter chosen from (i) concentration of at least one exhaust gas, (ii) mass of at least one exhaust gas, (iii) concentration of exhaust particulate matter; and (iv) mass of exhaust particulate matter; and

a housing for said gas analyzer system, said housing adapted to travel with a vehicle wherein said housing defines at least two internal zones, said at least two internal zones commonly enclosed by said housing, one of said analyzer components being in one of said internal zones and the other of said analyzer components being in another of said internal zones wherein said at least two zones being at different operating temperatures.

Claim 19 is directed to a vehicular gas emission analyzer assembly for traveling with a vehicle, comprising a gas analyzer system having at least two analyzer components. One of the analyzer components is operating at a particular temperature and another of said analyzer components is operating at an elevated temperature that is higher than said particular temperature. The gas analyzer system measures at least one emission parameter from an internal combustion engine chosen from concentration and/or mass of an exhaust gas and/or exhaust particulate matter. The housing is adapted to travel with a vehicle and defines at least two internal zones. The at least two internal zones are commonly enclosed by the housing. One of the analyzer components is in one of the internal zones and the other of the analyzer components in another of the internal zones wherein the at least two zones are at different operating temperatures.

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Even if the references are combined, the combined teaching of the references fails to disclose, teach or suggest one analyzer component, as defined in claim 19, being in one internal zone and another analyzer component being in another of the internal zones, wherein the at least two zones are at different operating temperatures. The Office Action recognizes that Breton1 fails to disclose, teach or suggest two zones at different temperatures. The only analyzer component mentioned in Leistner, namely, the NH-3 measuring device, is external to the cabinet. The only devices within the two compartments in Leistner are gas preparation elements, such as inlet valves, filters, flow pumps, and the like, which are not analyzer components as defined in the claims. Accordingly, even if the references are combined in the manner suggested in the Office Action, the combined references would suggest at most an on-board vehicle emission testing system having two compartments, the first compartment heated to 70° C and the second compartment heated to 5° C to 10° C with elements, such as inlet valves, filters, flow pumps, and the like, in a first compartment, flowmeters in the other compartment and the analyzer component external of both of the compartments. Accordingly, even if there would be a motivation to combine the prior art references, they do not teach or suggest all of the claimed limitations.

It is further submitted that there is no suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to combine the reference teachings. Breton1 is directed to an on-board vehicle emission testing system. Leistner is directed to a flue-gas analyzer for DENOX and flue-gas desulfurization plants. It is submitted that the skilled artisan would not consult a patent directed to DENOX and flue-gas desulfurization plants to modify a vehicle emission testing system. Moreover, it is submitted that the references teach away from the combination as claimed in claim 1. In particular, it is submitted that Leistner teaches that the analyzer component is to be external to the cabinet, not in one of the two components. Accordingly, rather than suggesting one analyzer compartment in one internal zone defined by the housing and another analyzer component in another internal zone defined by the housing, the references teach away from the combination or modification. Nor would there be any likelihood of success in the combination. There is nothing in the prior art to suggest that providing Breton1 with the heated gas preparation cabinet of Leistner would provide the result achieved by the invention as defined in claim 19. For all of these reasons, it is submitted that the Examiner has failed to establish a *prima facie* case of obviousness. Accordingly, the rejection should be withdrawn. Withdrawal is requested.

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Claims 29-35.

Claim 29 is dependent on claim 19 and further specifies that one of the at least two analyzer components comprises a heated device for measuring concentration of hydrocarbon, the heated device is at a temperature sufficiently high to reduce the deposit of hydrocarbon materials on the heated device. The application discloses that, by reducing the deposition of hydrocarbon molecules present in the sample gas upon inner surfaces of the heated devices, loss of hydrocarbon gas is reduced and the accuracy of measurement is increased. In Leistner, the gas-analyzing measuring equipment is outside of the cabinet and is not heated, much less heated to a temperature sufficiently high to reduce the deposit of hydrocarbon gas. Any alleged suggestion in Leistner that "gases must be maintained above the dew point," as set forth in the Office Action, is irrelevant. The invention as defined in claim 29 achieves the result of a more accurate measurement of the hydrocarbon by reducing deposition of hydrocarbon materials. This is particularly important for long-chain hydrocarbons present in certain fuels, such as diesel fuel.

Dependent claim 31, which is dependent on and further modifies claim 29, specifies that the heated device comprises a flame ionization device. This claim is further rejected over Mathews. While Mathews discloses a flame ionization analysis, it is submitted that the skilled artisan would not be motivated to provide such a device in an internal compartment of a housing for a gas analyzer system that is adapted to travel with a vehicle. Moreover, it is submitted that even if the combination is made, the claim limitations are not all met.

Claim 34, which is dependent on and further modifies claim 31, specifies that the device is for measuring concentration of hydrocarbon and heated to a temperature at or above 175° C. This claim is further rejected over Bandurski. Bandurski is directed to locating hydrocarbon source rock or other strata. It is submitted that Bandurski is not analogous art and would not be considered by the skilled artisan to modify the other references.

It is submitted that the rejection of claims 29-35 is improper and should be withdrawn. Withdrawal is requested.

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**Claims 61-78 and 81.**

Claim 61 is dependent on and further modifies claim 19. Claim 61 specifies that the housing, which is adapted to travel with a vehicle, is substantially moisture impervious in order to be resistant to environmental elements. Claim 69, which is dependent on and further modifies claim 19, specifies that the housing, which is adapted to travel with a vehicle, has an aspect ratio that is greater than or equal to two (2). Claim 81, which is dependent on and further modifies claim 19, specifies that the housing, which is adapted to travel with the vehicle is adapted to mounting at an external portion of a vehicle body.

In rejecting the claims, the Office Action does not make reference to any particular disclosure in the prior art. Rather, the Office Action dismisses these claims with statements such as "most housings are moisture impervious," . . . "it would have been obvious to one of ordinary skill in the art at the time of the invention to choose an aspect ratio and shape that fits the geometry of the situation," . . . "it would have been obvious to one of ordinary skill in the art at the time of the invention to shock mount any sensitive vehicle analyzer." The Office Action fails to recognize that it is the present application, not the prior art, which teaches a housing for a gas analyzer system having gas analyzer components that is adapted to travel with a vehicle. Therefore, it is impermissible to assume that the skilled artisan would know to use such a housing for a vehicle gas emission analyzer assembly, much less modify the housing in the manner suggested by the Office Action. As previously set forth, Leistner is not directed to an on-board vehicle emission testing system. In Breton1, only the exhaust gas flowmeter 10 is shown to be in a special housing. There is no special housing in Breton1 for the gas analyzer having gas analyzer components. It is only the present application, which is not prior art to itself, which teaches a housing for a gas analyzer system having gas analyzer components that is adapted to travel with a vehicle and which is substantially moisture impervious (claim 61), has an aspect ratio that is greater than or equal to 2 (claim 69), and is adapted to mounting at an external portion of a vehicle body (claim 81). It is submitted that the basis for the rejection has been overcome. Withdrawal is requested.

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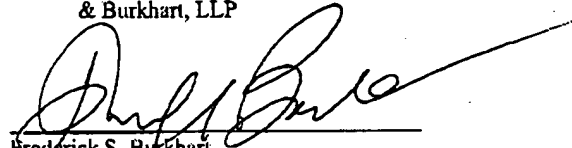
The remaining references applied by the Office Action and not discussed herein were applied only against dependent claims and not independent claim 19. Applicant does not acquiesce in the manner in which the Office Action applied these secondary references. Issuance of a Notice of Allowance is earnestly solicited. If Examiner Politzer has any questions or reservations, it is requested that Examiner Politzer call the undersigned attorney.

Respectfully submitted,

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